



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,863	01/22/2004	Michael J. Naquin SR.	BAO-0041	8503
23413	7590	09/02/2005	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			GAY, JENNIFER HAWKINS	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/763,863

Applicant(s)

NAQUIN ET AL.

Examiner

Jennifer H. Gay

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/22/04, 7/29/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the check valve in the exit passage as recited in claim 15 and a chemical being positioned at the expandable element as recited in claim 18 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because the abstract includes several occurrences of the implied phrase “disclosed herein”. Correction is required. See MPEP § 608.01(b).

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed

Art Unit: 3672

150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

4. Claims 2-15, 17-20, and 22-30 are objected to because of the following informalities:
 - Claims 2-15, 17-20, and 22-30 are objected to because "A seal element", "A seal system", and "A method" should be changed to --The seal element--, --The seal system--, and --The method-- respectively.
 - Claims 17 and 28 are objected to because they are considered to be improperly written Markush claims and should be corrected per MPEP 2173.05(h).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 26 and 27 are considered to be indefinite because it is unclear how the wellbore is either elastically or plastically expanded. For the purposes of examination, the examiner is assuming that applicant intended claims 26 and 27 to recite that the expandable element was either elastically or plastically expanded.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3, 5-14, 16, 19-27, 29, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Watson et al. (US 6,575,251).

Regarding claims 1, 16, 31: Watson et al. discloses a sealing system. The system includes the following features:

- A particle laden fluid.
- A pump capable of pumping the fluid (the examiner takes Official Notice that the use of a pump to inject the fluid into to the wellbore is considered to be well known in the art).
- An expandable element that includes the following features:
 - A base pipe 16.
 - A screen 54 disposed at the base pipe.
 - An expandable element 56 disposed radially outwardly of the base pipe and screen.

Regarding claims 2, 19: The element is progressively expanded.

Regarding claim 3: The element is impermeable to fluid.

Regarding claim 5: The screen allows the passage of fluid therethrough but impedes the passage of solids.

Regarding claim 6: The element and screen define an area where the particle laden fluid is accepted and the particles are retained.

Regarding claims 7, 22: The element is maintained in an expanded condition by a grain-to-grain contact of the particles.

Regarding claims 8, 9, 20, 23, 24, 25: The fluid is drained off to the base pipe and then the wellbore annulus (9:22-25).

Regarding claims 10, 12, 14: The element includes a slurry entrance passage **52** that includes a check valve.

Regarding claim 11: The screen is spaced from the base pipe to facilitate drain off.

Regarding claim 13: The element includes a fluid exit passage **58**.

Regarding claim 21: Watson et al. discloses a method for sealing a wellbore using the above apparatus.

Regarding claims 26, 27: The element is expanded.

Regarding claim 29: The fluid includes particulate that is more dense than the fluid.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4, 15, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al.

Regarding claim 4: Watson et al. discloses all of the limitations of the above claims except for the expandable element being fluid permeable. However, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the expandable element of Watson et al. so that it was fluid permeable in order to have increased the rate of slurry dehydration thus decreasing the time before the packer was fully expanded and set.

Regarding claim 15: Watson et al. discloses all of the limitations of the above claims except for the exit passage including a check valve. However, it would have been

Art Unit: 3672

considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the exit passage of Watson et al. to include a check valve in order to have prevented the slurry from escaping the packer before the packer has been fully inflated.

Regarding claim 30: Watson et al. discloses all of the limitations of the above claims except for the slurry including particulate that is less dense than the fluid. However, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the fluid of Watson et al. to be a slurry with particulate that was less dense than the fluid, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

11. Claims 17, 18, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al. in view of Brooks et al. (US 5,271,469).

Watson et al. discloses all of the limitations of the above claims except for the particle laden fluid including a particulate matter coated with a material that bonds individual particles together over time.

Brooks et al. discloses an inflatable packer similar to that of Watson et al. Brooks et al. further teaches inflating the packer with cement, which hardens, i.e. bonds the individual particles together, over time.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the packer of Watson et al. such that it was inflated with the cement of Brooks et al. in order to have used a slurry that provided a permanent inflation of the packer thus ensuring that the seal provided would not fail.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

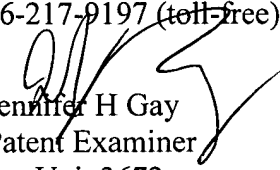
The remaining references made of record disclose various wellbore inflatable packers.

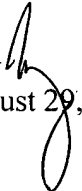
Art Unit: 3672

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H. Gay whose telephone number is (571) 272-7029. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jennifer H Gay
Patent Examiner
Art Unit 3672

JHG 
August 29, 2005